

IN THE CLAIMS

1. (Canceled).
2. (Previously Amended). The system of claim 17 wherein said controller is adapted to advance said piston after said container reservoir has a predetermined amount of fluid to purge air.
3. (Previously Amended). The system of claim 17 wherein said delivery system includes a tube extending from said reservoir further comprising a valve coupled to said tube and arranged to allow fluid to be ejected from the syringe reservoir in a first position, and fluid to flow into the syringe reservoir from the fluid source on a second position.
4. (Previously Amended). The system of claim 17 wherein said container reservoir is a syringe.
5. (Previously Amended). The system of claim 17 wherein said controller defines an aspiration mode during which said piston is at least partially retrieved to cause fluid to flow toward said piston.
6. (Previously Amended). The system of claim 5 further comprising a selector controlled by an operator to indicate a desired mode of operation, wherein said controller selects said aspiration mode and said charging mode in response to a position of said selector.

7. (Original). The system of claim 6 wherein said selector is adapted to indicate an aspiration operation, and wherein said controller is adapted to move said piston back by a predetermined distance, stop said piston and then move said piston forward again, thereby causing fluid to flow back from the patient and then forward into the patient.

8. (Original). The system of claim 7 wherein during said aspiration operation, wherein said controller is adapted to move said piston to the position at which the aspiration operation has started.

9. (Previously Amended). The system of claim 5 wherein said controller is adapted to select the aspiration mode at the end of an injection, wherein during said aspiration mode said piston is moved back by said controller by a sufficient amount to retrieve fluid from said syringe reservoir.

Claims 10-16 (Canceled).

17. (Currently Amended). An electronic device for selectively injecting or withdrawing fluid from a patient's body comprising:

- a reservoir for injecting or collecting said fluid;

- a source of therapeutic fluid;

- a fluid delivery system having a first end coupled to said reservoir and a second

end adapted to be inserted into the patient's body;

an electrical drive mechanism with a piston movable within said reservoir, said electrical drive mechanism selectively operating in one of a charging mode and an injection mode in response to commands;

a sensor coupled to one of said reservoir, fluid delivery system and electrical drive mechanism for sensing an internal parameter indicative of a force generated by said drive mechanism and internal resistances within said reservoir and said fluid delivery system to said force; and

a controller coupled to said sensor and said electrical drive mechanism, said controller including a calculator for calculating an entry/exit pressure at said second end as a function of said internal parameter, said controller generating said commands for said drive mechanism to control said entry/exit pressure;

[a controller adapted to generate commands for said drive mechanism;]

wherein said pump in said charging mode is advanced to an empty position and then the piston is retrieved to a full position with the reservoir connected to the source of therapeutic fluid thereby causing said therapeutic fluid to fill said container.

18. (Canceled).

19. (Canceled).